

Title (en)

Use of lycopene for reducing the activity of cells, especially of cancer cells, and pharmaceutical preparations.

Title (de)

Verwendung von Zycopen zur Verminderung der Zellaktivität, insbesondere von Krebszellen, sowie entsprechende pharmazeutische Zubereitungen.

Title (fr)

Utilisation de lycopène pour réduire l'activité de cellules, en particulier de cellules de cancer et préparations pharmaceutiques.

Publication

**EP 0600544 A1 19940608 (EN)**

Application

**EP 93203295 A 19931125**

Priority

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Abstract (en)

A method of reducing the activity of a cell comprises administering to the cell of a subject in need thereof, directly or systemically, a cell activity-reducing effective amount of lycopene. Pharmaceutical composition are described, for inhibiting the growth of cancer cells, comprising as an active ingredient a cancer cell growth-inhibiting effective amount of lycopene. <IMAGE>

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IPC 8 full level

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Citation (search report)

- [XY] EP 0393690 A1 19901024 - KIRIN BREWERY [JP]
- [X] EP 0467795 A2 19920122 - PATRINOVE [FR], et al
- [XY] WO 8503225 A1 19850801 - OREAL [FR]
- [XY] GB 1509587 A 19780504 - AJINOMOTO KK
- [DY] US 5008295 A 19910416 - NISHINO HOYOKU [JP], et al
- [DXDY] C.J. WANG ET AL: "Inhibition of growth and development of the transplantable c-6 glioma cells inoculated in rats by retinoids and carotenoids", CANCER LETTERS, vol. 48, no. 2, 1989, pages 135 - 142, XP026178467, DOI: doi:10.1016/0304-3835(89)90050-5
- [DXDY] WANG CJ ET AL: "Inhibitory effects of carotenoids and retinoids on the in vitro growth of rat C-6 glioma cells.", PROC NATL SCI COUNC REPUB CHINA UB], vol. 13, no. 3, July 1989 (1989-07-01), pages 176 - 183
- [XY] COUNTRYMAN C ET AL: "LYCOPENE INHIBITS THE GROWTH OF THE HL-60 PROMYELOCYTIC LEUKEMIA CELL LINE", 43RD NATIONAL MEETING OF THE AMERICAN ASSOCIATION FOR CLINICAL CHEMISTRY, INC., WASHINGTON, D.C., USA, JULY 28-AUGUST 1, 1991.;& CLIN CHEM,, VOL. 37, NO. 6, PAGE(S) 1056, 1991
- [XY] CONN PF ET AL: "Carotene-oxygen radical interactions.", FREE RADIC RES COMMUN, vol. 16, no. 6, 1992, pages 401 - 408
- [XY] MILANI C ET AL: "Action of lycopene in the experimental gastric ulcer.", PHARMACOLOGY, vol. 4, no. 6, 1970, pages 334 - 340, XP009010169
- [Y] ZHANG, LI XIN ET AL: "Carotenoids up-regulate connexin43 gene expression independent of their provitamin A or antioxidant properties", CANCER RES., vol. 52, no. 20, 1992, pages 5707 - 5712

Cited by

EP0759294A3; AU2001244511B2; IT201700005649A1; AU762968B2; AU2003280504B2; EP1314438A1; EP0793491A4; EP0818225A1; US5897866A; AU722774B2; EP1937288A4; US11318108B2; US6858236B2; WO2018134717A1; WO0178701A3; WO0061130A1; US6482447B2; US6399115B2; US7144586B2; US6958164B2; US8669293B2; US6262109B1; US6362221B1; US8354126B1; WO2004002238A1; WO03043658A1; KR100818973B1

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